

Section 7a Compliance Analysis

Adrian Dry Cleaners
444 W. Maumee Street
Adrian, Michigan 49221

SE Michigan Cleaners, Inc.
444 W. Maumee Street
Adrian, Michigan 49221

· March 30, 2006

ASTI ENVIRONMENTAL



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Report Prepared For:

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Adrian, Michigan 49221

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Attachment B	Pavement Inspection Form
Attachment C	Spill Control Plan
Attachment D	Health and Safety Procedures for Excavations

INTRODUCTION

This Section 7a Compliance Analysis has been prepared for the Adrian Dry Cleaners located at 444 W. Maumee in Adrian, Michigan. A Baseline Environmental Assessment (BEA) was completed on March 27, 2006 that discussed the presence of contaminated soil and groundwater from the historical use of the Property as a dry cleaner. The Property is operated by SE Michigan Cleaners, Inc.

This Section 7a Compliance Analysis has been prepared according to the Part 10 Rules promulgated under Part 201 of the Michigan Natural Resources and Environmental Protection Act, P.A. 451 of 1994, as amended (Act 451).

1.0 DETAILED CHARACTERISTICS OF PROPERTY USE

1.1 Property Use

The Property will continue to be used as a dry cleaner. The entire Property is located within the tenant space addressed as 444 W. Maumee, which is part of the Adrian Plaza Shopping Center. The subject building is part of a strip mall with three occupied tenant suites. The Property occupies a 36' x 64' (2,304 sq. ft.) space. A site location map is presented on Figure 1.

1.2 Existing Infrastructure

The Property consists of a 2,304 square foot tenant suite addressed as 444 W. Maumee, which is part of the Adrian Plaza Shopping Center. A Site Detail Map is presented on Figure 2.

Natural gas is supplied by Citizens Energy. Electricity is supplied by Consumers Energy. There are no manholes, manways, or boxes associated with the gas or electrical services requiring special due care policies or procedures.

The City of Adrian provides municipal water and sewer services to the Property. There are no subsurface structures associated with the water or sewer services requiring special due care policies or procedures.

1.3 Construction or Demolition

SE Michigan Cleaners, Inc. does not have any immediate plans for construction or demolition at this Property. SE Michigan Cleaners, Inc. leases the Property from Adrian Plaza, LLC. Any future construction or demolition will be conducted in accordance with applicable laws and regulations in a manner to protect public health and safety and the environment.

2.0 HAZARDOUS SUBSTANCE INFORMATION

2.1 Presence of Hazardous Substances

Environmental investigations were conducted between 2003 and 2004 by consultants for Adrian Plaza, LLC, current Property owner. To confirm the presence of residual contamination at the Property, ASTI collected and analyzed soil and groundwater samples on February 17-20, 2006.

Contaminants from a release or releases of dry cleaning solvents remain in soil and groundwater at concentrations exceeding generic residential criteria established under Part 201 of the Michigan Natural Resources and Environmental Protection Act

Soil

Tetrachlorethene, trichloroethene, and cis-1,2-dichloroethene were detected in soil samples collected from beneath the Property during the subsurface investigation. The highest detected concentrations are summarized below:

SUMMARY OF PART 201 EXCEEDANCES – SOIL				
Chemical Name	CAS Number	Highest Concentration (µg/kg)	Criteria Exceeded	Locations
Tetrachloroethene	127184	100,000	DWP, GSI, SVIAI, DC	AP-SS-9 through AP-SS-13
Trichloroethene	79016	180	DWP	AP-SS-8, AP-SS-9, and AP-SS-11
Cis-1,2-Dichloroethene	156592	140	NA	AP-SS-9

DWP = Drinking Water Protection
GSI = Groundwater Surface Water Interface Protection
SVIAI = Soil Volatilization to Indoor Air Inhalation
DC = Direct Contact
NA = Not Applicable

These contaminated soils underlie the perimeter of the Property and underlie surface pavement. Contaminant concentrations in soils are illustrated on Figure 3.

Groundwater

Groundwater contamination is present on the Property, as indicated by groundwater sampling results from an existing monitoring well (SP-8) located on the east side of the Property. Tetrachloroethene remains at concentrations exceeding generic residential and commercial I drinking water criteria as summarized below. Groundwater samples were also collected from existing monitoring wells (SP4 and SP5) located east of the Property. Tetrachloroethene impacts at SP5 exceeded generic residential and commercial I drinking water criteria. At SP4, tetrachloroethene and trichloroethene concentrations exceeded generic residential and commercial I drinking water criteria and groundwater surface water interface criteria.

SUMMARY OF PART 201 EXCEEDANCES – GROUNDWATER				
Chemical Name	CAS Number	Highest Concentration (µg/L)	Criteria Exceeded	Locations
Tetrachloroethene	127184	13	DW	SP8

NA = Not applicable

DW = Drinking Water

Contaminant concentrations for groundwater samples collected on March 18, 2006 are illustrated on Figure 3.

2.2 Exposure Pathways

The potential exposure pathways for soil and groundwater contamination at the Property are drinking water protection, groundwater surface water interface protection, soil volatilization to indoor air inhalation, direct contact, and drinking water protection criteria.

Exposure by soil leaching to groundwater and groundwater ingestion are not applicable. The Property and surrounding properties are served by the City of Adrian municipal water system.

Exposure by discharge to surface water is possible. The nearest surface water body is the River Raisin, which is located approximately 650 feet east of the Property. Localized groundwater flow direction was not determined by ASTI; however, it is likely that natural attenuation would reduce contaminant concentrations in groundwater to concentrations below GSI criteria before discharge to surface water.

Exposure by soil volatilization to indoor air is unlikely. Tetrachloroethene concentrations at AP-SS-9 exceed the Commercial III Part 201 criteria for soil volatilization to indoor air. However, all floor cracks and floor drains in the concrete will be filled and the floor will be sealed with an impermeable coating, eliminating the potential for exposure. Additionally, the concrete sump pits will be inspected for cracks. If cracks are identified, they will be patched.

Exposure by direct contact is unlikely because the contaminated soil and groundwater is isolated by pavement. In the unlikely event that pavement is removed and excavation occurs in this area, appropriate health and safety procedures will be implemented.

Free product has not been observed in soils or groundwater on the Property. Tetrachloroethene concentrations at AP-SS-9 were detected above soil saturation (C_{sat}) criteria. There are no known fire or explosion hazards associated with tetrachloroethene.

2.3 Intended Hazardous Substance Use

Perchloroethylene (CAS No. 127-18-4) also known as tetrachloroethene, PCE, or “Perc” is the only hazardous substance intended to be stored and utilized at the Property.

A Material Safety Data Sheet (MSDS) for perchloroethylene is presented in Appendix A.

3.0 PLAN FOR RESPONSE ACTIVITIES

3.1 Response Activities

Response activities to prepare the subject building for continued use for dry cleaning operations are inspection and patching of paved surfaces throughout the building. The concrete floor in the dry cleaning area will be sealed with an impermeable coating and the dry cleaning machine and the associated 55-gallon waste container will be placed in secondary containment to prevent any potential spills or leaks from reaching the paved surfaces. The coating will also facilitate cleanup of any spills or leaks. Lids for the sump pits will be replaced with gaskets to eliminate the potential for any spills to enter the sumps.

The impermeable coating will further reduce the potential for VOC compounds in the soil and groundwater to volatilize to indoor air.

3.2 Effectiveness of Response Activities

Repair and maintenance of pavement, secondary containment for the dry cleaning machine and the associated 55-gallon waste container, the impermeable coating of the floor, and the gaskets for the sump pits will effectively prevent spilled or leaked liquids from entering the subsurface and commingling with the existing contamination.

3.3 Restrictions on Property Use

No excavation and/or dewatering will occur on the Property unless directed and supervised by the property owner or an authorized agent. Excavated soils will not be removed from the Property unless they are sampled and analyzed for VOCs. If excavated soils are impacted, landfill or other appropriate disposal may be required. Similarly, if dewatering of excavations is necessary, permits for discharge of pumped water to storm or sanitary sewers may be required, or pumped water may need to be collected and hauled to a licensed treatment facility.

No water wells will be installed on the Property.

3.4 Monitoring and Maintenance

A draft pavement inspection form is presented in Attachment B. Paved surfaces within the building, including the sump pits, will be inspected annually. Any new cracks or deteriorated patching or caulking will be patched or recaulked as appropriate.

Spill control procedures for dry cleaning solvents will be established. Delivery, storage, use, and reclamation of dry cleaning solvents will be restricted to the dry cleaning area, within the secondary containment, and on impermeable coated surfaces. Spill kits consisting of absorbent materials and emergency instructions will be available at all times within the dry cleaning area. Dry cleaning and maintenance workers will be trained in spill control procedures. Draft spill control procedures are presented in Attachment C.

4.0 EVALUATION AND DEMONSTRATION OF COMPLIANCE WITH SECTION 7A OBLIGATIONS

4.1 Exacerbation

4.1.1 Prevention of Exacerbation

There will be no activities in the area of impacted soils or groundwater that would allow increased migration of contaminants. The presence of pavement, secondary containment, impermeable coating, and gasketed covers on the sump pits will prevent liquids from entering the subsurface and will prevent tracking of impacted soils by foot traffic.

4.1.2 No Increase in Response Costs

There will be no new, permanent structures placed over the areas of contaminated soils and groundwater. If active remediation of soils or groundwater is required in the future, accessibility will not be reduced by response activities or dry cleaning operations.

4.2 Due Care

The maintenance of pavement and an impermeable coating over the area of contaminated soils and groundwater, prevention or supervision of excavation, and prevention of unauthorized discharge from dewatering operations will prevent unacceptable exposures by soil or groundwater volatilization to indoor air, direct contact, or surface water pathways.

If any excavation or dewatering activities are conducted on the Property, appropriate health and safety procedures will be followed. A health and safety plan summary is presented in Attachment D. Health and safety procedures will apply to SE Michigan Cleaners, Inc. personnel, contractors and subcontractors, and public entities and their contractors and subcontractors. SE Michigan Cleaners, Inc. will inform utility companies or public entities, whose contractors and subcontractors are not hired by SE Michigan Cleaners, Inc., of the presence of contamination and will provide copies of the health and safety procedures.

Due to detection of contamination in groundwater migrating off-site at concentrations exceeding DW and GSI criteria, SE Michigan Cleaners, Inc. submitted a Notice of Off-Site Migration of Contamination (Rule 1017 Notice) to MDEQ on March 30, 2006.

SE Michigan Cleaners will not install potable water wells on the Property.

4.2 Reasonable Precautions

The area of contaminated soils and groundwater is within the building. Access will be restricted to employees and agents of the owner or operator. Prevention or supervision of excavation and discharge of groundwater, as discussed above, and routine observation of the area will constitute precautions against the reasonably foreseeable acts or omissions of a third party.

Tables

Table 1 Summary of Soil Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Groundwater		Soil		Soil Saturation Concentration Screening Levels*	Soil Saturation Concentration Screening Levels*					
	Drinking Water Protection Criteria*	Surface Water Interface Protection Criteria*	Volatilization to Indoor Air Inhalation Criteria*	Direct Contact Criteria*		SP1 7.5'	SP2 7.5'	SP4 7'	SP4 11.5'	SP5 9'	SP5 11'
Acetone	15,000	34,000	110,000,000 (C)	23,000,000	110,000,000	<750	<750	<750	<750	<750	<750
Acrylonitrile	52	98 (X)	6,600	16,000	8,300,000	<250	<250	<250	<250	<250	<250
Benzene	100	4,000 (X)	1,600	180,000	400,000	<50	<50	<50	<50	<50	<50
Bromobenzene	550	NA	310,000	540,000	760,000	~	~	~	~	~	~
Bromochloromethane	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Bromodichloromethane	1,600 (W)	ID	1,200	110,000	1,500,000	<100	<100	<100	<100	<100	<100
Bromoform	1,600 (W)	ID	150,000	820,000	870,000	<100	<100	<100	<100	<100	<100
Bromomethane	200	700	860	320,000	2,200,000	<250	<250	<250	<250	<250	<250
2-Butanone	260,000	44,000	27,000,000 (C)	27,000,000 (C,DD)	27,000,000	<250	<250	<250	<250	<250	<250
n-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<50
sec-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	~	~	~	~	~	~
tert-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	~	~	~	~	~	~
Carbon disulfide	16,000	ID	76,000	280,000 (C,DD)	280,000	<250	<250	<250	<250	<250	<250
Carbon tetrachloride	100	900 (X)	190	96,000	390,000	<50	<50	<50	<50	<50	<50
Chlorobenzene	2,000	940	120,000	260,000 (C)	260,000	<50	<50	<50	<50	<50	<50
Chloroethane	8,600	ID	950,000 (C)	950,000 (C)	950,000	<250	<250	<250	<250	<250	<250
Chloroform	1,600 (W)	3,400 (X)	7,200	1,200,000	1,500,000	<50	<50	<50	<50	<50	<50
Chloromethane	5,200	ID	2,300	1,100,000 (C)	1,100,000	<250	<250	<250	<250	<250	<250
2-Chlorotoluene	3,300	NA	270,000	500,000	500,000	~	~	~	~	~	~
Dibromochloromethane	1,600 (W)	ID	3,900	110,000	610,000	<100	<100	<100	<100	<100	<100
1,2-Dibromo-3-chloropropane	-	-	-	-	-	<250	<250	<250	<250	<250	<250
Dibromomethane	1,600	NA	ID	2,000,000 (C)	2,000,000	<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	14,000	360	210,000 (C)	210,000 (C)	210,000	<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	170	1,100	ID	170,000 (C)	170,000	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	1,700	290	19,000	400,000	NA	<100	<100	<100	<100	<100	<100
Dichlorodifluoromethane	95,000	ID	900,000	1,000,000 (C)	1,000,000	<100	<100	<100	<100	<100	<100
1,1-Dichloroethane	18,000	15,000	230,000	890,000 (C)	890,000	<50	<50	<50	<50	<50	<50
1,2-Dichloroethane	100	7,200 (X)	2,100	91,000	1,200,000	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	140	1,300 (X)	62	200,000	570,000	<50	<50	<50	<50	<50	<50
cis-1,2-Dichloroethene	1,400	12,000	22,000	640,000 (C)	640,000	<50	<50	76	<50	<50	<50
trans-1,2-Dichloroethene	2,000	30,000	23,000	1,400,000 (C)	1,400,000	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane	100	5,800 (X)	4,000	140,000	550,000	<50	<50	<50	<50	<50	<50
cis-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,4-Dichloro-2-butene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
Diethyl ether	200	ID	7,400,000	7,400,000	7,400,000	<250	<250	<250	<250	<250	<250
Ethyl benzene	1,500	360	87,000	140,000 (C)	140,000	<50	<50	<50	<50	<50	<50
Ethylene Dibromide	250 (M)	250 (M)	670	250 (M)	890,000	<50	<50	<50	<50	<50	<50
Hexachloroethane	430	1,800 (X)	40,000	230,000	NA	<100	<100	<100	<100	<100	<100
2-Hexanone	20,000	NA	990,000	2,500,000 (C)	44,000	<250	<250	<250	<250	<250	<250
Methyl iodide	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Isopropylbenzene	91,000	ID	390,000 (C)	390,000 (C)	390,000	<100	<100	<100	<100	<100	<100
4-Methyl-2-pentanone	36,000	ID	2,700,000 (C)	2,700,000 (C)	2,700,000	<250	<250	<250	<250	<250	<250
Methylene chloride	100	19,000 (X)	45,000	1,300,000	2,300,000	<250	<250	<250	<250	<250	<250
2-Methylnaphthalene	57,000	ID	ID	8,100,000	NA	<250	<250	<250	<250	<250	<250
Methyl (tert)butyl ether	800	15,000 (X)	5,900,000 (C)	1,500,000	5,900,000	<250	<250	<250	<250	<250	<250
Naphthalene	35,000	870	250,000	16,000,000	NA	<250	<250	<250	<250	<250	<250
n-Propylbenzene	1,600	NA	ID	2,500,000	10,000,000	<100	<100	<100	<100	<100	<100
Styrene	2,700	2,200	250,000	400,000	520,000	<50	<50	<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	1,500	ID (X)	6,200	440,000 (C)	440,000	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	170	1,600 (X)	4,300	53,000	870,000	<100	<100	<100	<100	<100	<100
Tetrachloroethene	100	900 (X)	11,000	88,000 (C)	88,000	460	57	5,500	<50	510	<50
Toluene	16,000	2,800	250,000 (C)	250,000 (C)	250,000	<50	<50	<50	<50	<50	<50
1,2,3-Trichlorobenzene	-	-	-	-	-	<250	<250	<250	<250	<250	<250
1,2,4-Trichlorobenzene	4,200	1,800	1,100,000 (C)	990,000 (DD)	1,100,000	<250	<250	<250	<250	<250	<250
1,1,1-Trichloroethane	4,000	4,000	250,000	460,000 (C)	460,000	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	100	6,600 (X)	4,600	180,000	920,000	<50	<50	<50	<50	<50	<50
Trichloroethene	100	4,000 (X)	7,100	500,000 (C,DD)	500,000	<50	<50	190	<50	<50	<50
Trichlorofluoromethane	52,000	NA	560,000 (C)	560,000 (C)	560,000	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	840	NA	ID	830,000 (C)	830,000	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	2,100	570	110,000 (C)	110,000 (C)	110,000	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	1,800	1,100	94,000 (C)	94,000 (C)	94,000	<100	<100	<100	<100	<100	<100
Vinyl chloride	40	300	270	3,800	490,000	<40	4	<40	<40	<40	<40
Xylenes	5,600	700	150,000 (C)	150,000 (C)	150,000	<150	<150	<150	<150	<150	<150

*Per Operational Memorandum #1, Revised December 10, 2004.

~ Parameter not tested for at his location.

ID-Inadequate data to develop criterion.

NA-Not available.

C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L.

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source

Table 1 Summary of Soil Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Groundwater		Soil Volatilization to Indoor Air Inhalation Criteria*	Direct Contact Criteria*	Soil Saturation Concentration Screening Levels*	Soil Saturation					
	Drinking Water Protection Criteria*	Surface Water Interface Protection Criteria*				SP6 8' 10/25/04	SP6 12' 10/25/04	SP7 8' 10/25/04	SP7 12' 10/25/04	SP8 8' 10/25/04	SP9 1' 11/16/04
Acetone	15,000	34,000	110,000,000 (C)	23,000,000	110,000,000	<750	<750	<750	<750	<750	<17300
Acrylonitrile	52	98 (X)	6,600	16,000	8,300,000	<250	<250	<250	<250	<250	<5750
Benzene	100	4,000 (X)	1,600	180,000	400,000	<50	<50	<50	<50	<50	<1200
Bromobenzene	550	NA	310,000	540,000	760,000	-	-	-	-	-	-
Bromochloromethane	-	-	-	-	-	<100	<100	<100	<100	<100	<2300
Bromodichloromethane	1,600 (W)	ID	1,200	110,000	1,500,000	<100	<100	<100	<100	<100	<2300
Bromoform	1,600 (W)	ID	150,000	820,000	870,000	<100	<100	<100	<100	<100	<2300
Bromomethane	200	700	860	320,000	2,200,000	<250	<250	<250	<250	<250	<5750
2-Butanone	260,000	44,000	27,000,000 (C)	27,000,000 (C,DD)	27,000,000	<250	<250	<250	<250	<250	<5750
n-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<1200
sec-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	-	-	-	-	-	-
tert-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	-	-	-	-	-	-
Carbon disulfide	16,000	ID	76,000	280,000 (C,DD)	280,000	<250	<250	<250	<250	<250	<5750
Carbon tetrachloride	100	900 (X)	190	96,000	390,000	<50	<50	<50	<50	<50	<1200
Chlorobenzene	2,000	940	120,000	260,000 (C)	260,000	<50	<50	<50	<50	<50	<1200
Chloroethane	8,600	ID	950,000 (C)	950,000 (C)	950,000	<250	<250	<250	<250	<250	<5750
Chloroform	1,600 (W)	3,400 (X)	7,200	1,200,000	1,500,000	<50	<50	<50	<50	<50	<1200
Chloromethane	5,200	ID	2,300	1,100,000 (C)	1,100,000	<250	<250	<250	<250	<250	<5750
2-Chlorotoluene	3,300	NA	270,000	500,000	500,000	-	-	-	-	-	-
Dibromochloromethane	1,600 (W)	ID	3,900	110,000	610,000	<100	<100	<100	<100	<100	<2300
1,2-Dibromo-3-chloropropane	-	-	-	-	-	<250	<250	<250	<250	<250	<5750
Dibromomethane	1,600	NA	ID	2,000,000 (C)	2,000,000	<100	<100	<100	<100	<100	<2300
1,2-Dichlorobenzene	14,000	360	210,000 (C)	210,000 (C)	210,000	<100	<100	<100	<100	<100	<2300
1,3-Dichlorobenzene	170	1,100	ID	170,000 (C)	170,000	<100	<100	<100	<100	<100	<2300
1,4-Dichlorobenzene	1,700	290	19,000	400,000	NA	<100	<100	<100	<100	<100	<2300
Dichlorodifluoromethane	95,000	ID	900,000	1,000,000 (C)	1,000,000	<100	<100	<100	<100	<100	<2300
1,1-Dichloroethane	18,000	15,000	230,000	890,000 (C)	890,000	<50	<50	<50	<50	<50	<1200
1,2-Dichloroethane	100	7,200 (X)	2,100	91,000	1,200,000	<50	<50	<50	<50	<50	<1200
1,1-Dichloroethene	140	1,300 (X)	62	200,000	570,000	<50	<50	<50	<50	<50	<1200
cis-1,2-Dichloroethene	1,400	12,000	22,000	640,000 (C)	640,000	<50	<50	<50	<50	<50	<1200
trans-1,2-Dichloroethene	2,000	30,000	23,000	1,400,000 (C)	1,400,000	<50	<50	<50	<50	<50	<1200
1,2-Dichloropropane	100	5,800 (X)	4,000	140,000	550,000	<50	<50	<50	<50	<50	<1200
cis-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<1200
trans-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<1200
trans-1,4-Dichloro-2-butene	-	-	-	-	-	<50	<50	<50	<50	<50	<1200
Diethyl ether	200	ID	7,400,000	7,400,000	7,400,000	<250	<250	<250	<250	<250	<5750
Ethyl benzene	1,500	360	87,000	140,000 (C)	140,000	<50	<50	<50	<50	<50	<1200
Ethylene Dibromide	250 (M)	250 (M)	670	250 (M)	890,000	<50	<50	<50	<50	<50	<1200
Hexachloroethane	430	1,800 (X)	40,000	230,000	NA	<100	<100	<100	<100	<100	<2300
2-Hexanone	20,000	NA	990,000	2,500,000 (C)	44,000	<250	<250	<250	<250	<250	<5750
Methyl iodide	-	-	-	-	-	<100	<100	<100	<100	<100	<2300
Isopropylbenzene	91,000	ID	390,000 (C)	390,000 (C)	390,000	<100	<100	<100	<100	<100	<2300
4-Methyl-2-pentanone	36,000	ID	2,700,000 (C)	2,700,000 (C)	2,700,000	<250	<250	<250	<250	<250	<5750
Methylene chloride	100	19,000 (X)	45,000	1,300,000	2,300,000	<250	<250	<250	<250	<250	<5750
2-Methylnaphthalene	57,000	ID	ID	8,100,000	NA	<250	<250	<250	<250	<250	<5750
Methyl (tert)butyl ether	800	15,000 (X)	5,900,000 (C)	1,500,000	5,900,000	<250	<250	<250	<250	<250	<5750
Naphthalene	35,000	870	250,000	16,000,000	NA	<250	<250	<250	<250	<250	<5750
n-Propylbenzene	1,600	NA	ID	2,500,000	10,000,000	<100	<100	<100	<100	<100	<2300
Styrene	2,700	2,200	250,000	400,000	520,000	<50	<50	<50	<50	<50	<1200
1,1,1,2-Tetrachloroethane	1,500	ID (X)	6,200	440,000 (C)	440,000	<100	<100	<100	<100	<100	<2300
1,1,2,2-Tetrachloroethane	170	1,600 (X)	4,300	53,000	870,000	<100	<100	<100	<100	<100	<2300
Tetrachloroethene	100	900 (X)	11,000	88,000 (C)	88,000	410	<50	190	<50	1,500	98,000
Toluene	16,000	2,800	250,000 (C)	250,000 (C)	250,000	<50	<50	<50	<50	<50	<1200
1,2,3-Trichlorobenzene	-	-	-	-	-	<250	<250	<250	<250	<250	<5750
1,2,4-Trichlorobenzene	4,200	1,800	1,100,000 (C)	990,000 (DD)	1,100,000	<250	<250	<250	<250	<250	<5750
1,1,1-Trichloroethane	4,000	4,000	250,000	460,000 (C)	460,000	<50	<50	<50	<50	<50	<1200
1,1,2-Trichloroethane	100	6,600 (X)	4,600	180,000	920,000	<50	<50	<50	<50	<50	<1200
Trichloroethene	100	4,000 (X)	7,100	500,000 (C,DD)	500,000	<50	<50	<50	<50	<50	<1200
Trichlorofluoromethane	52,000	NA	560,000 (C)	560,000 (C)	560,000	<100	<100	<100	<100	<100	<230
1,2,3-Trichloropropane	840	NA	ID	830,000 (C)	830,000	<100	<100	<100	<100	<100	<2300
1,2,4-Trimethylbenzene	2,100	570	110,000 (C)	110,000 (C)	110,000	<100	<100	<100	<100	<100	<2300
1,3,5-Trimethylbenzene	1,800	1,100	94,000 (C)	94,000 (C)	94,000	<100	<100	<100	<100	<100	<2300
Vinyl chloride	40	300	270	3,800	490,000	<40	<40	<40	<40	<40	<920
Xylenes	5,600	700	150,000 (C)	150,000 (C)	150,000	<150	<150	<150	<150	<150	<3450

*Per Operational Memorandum #1, Revised December 10, 2004.

- Parameter not tested for at his location.

ID-Inadequate data to develop criterion.

NA-Not available.

C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L.

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source.

Table I Summary of Soil Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Groundwater		Soil		Soil Saturation Concentration Screening Levels*	Soil Saturation					
	Drinking Water Protection Criteria**	Surface Water Interface Protection Criteria*	Volatilization to Indoor Air Inhalation Criteria*	Direct Contact Criteria*		SP9 9'	AP-SS-8 2'	AP-SS-9 1-1.5'	AP-SS-9 3'	AP-SS-10 1-2'	AP-SS-10 4-5'
Acetone	15,000	34,000	110,000,000 (C)	23,000,000	110,000,000	<750	<1000	<1000	<1000	<1000	<1000
Acrylonitrile	52	98 (X)	6,600	16,000	8,300,000	<250	<100	<100	<100	<100	<100
Benzene	100	4,000 (X)	1,600	180,000	400,000	<50	<50	<50	<50	<50	<50
Bromobenzene	550	NA	310,000	540,000	760,000	-	<100	<100	<100	<100	<100
Bromochloromethane	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Bromodichloromethane	1,600 (W)	ID	1,200	110,000	1,500,000	<100	<100	<100	<100	<100	<100
Bromoform	1,600 (W)	ID	150,000	820,000	870,000	<100	<100	<100	<100	<100	<100
Bromomethane	200	700	860	320,000	2,200,000	<250	<250	<250	<250	<250	<250
2-Butanone	260,000	44,000	27,000,000 (C)	27,000,000 (C,DD)	27,000,000	<250	<750	<750	<750	<750	<750
n-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<50
sec-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	-	<50	<50	<50	<50	<50
tert-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	-	<50	<50	<50	<50	<50
Carbon disulfide	16,000	ID	76,000	280,000 (C,DD)	280,000	<250	<250	<250	<250	<250	<250
Carbon tetrachloride	100	900 (X)	190	96,000	390,000	<50	<50	<50	<50	<50	<50
Chlorobenzene	2,000	940	120,000	260,000 (C)	260,000	<50	<50	<50	<50	<50	<50
Chloroethane	8,600	ID	950,000 (C)	950,000 (C)	950,000	<250	<250	<250	<250	<250	<250
Chloroform	1,600 (W)	3,400 (X)	7,200	1,200,000	1,500,000	<50	<50	<50	<50	<50	<50
Chloromethane	5,200	ID	2,300	1,100,000 (C)	1,100,000	<250	<250	<250	<250	<250	<250
2-Chlorotoluene	3,300	NA	270,000	500,000	500,000	-	<50	<50	<50	<50	<50
Dibromochloromethane	1,600 (W)	ID	3,900	110,000	610,000	<100	<100	<100	<100	<100	<100
1,2-Dibromo-3-chloropropane	-	-	-	-	-	<250	<10	<10	<10	<10	<10
Dibromomethane	1,600	NA	ID	2,000,000 (C)	2,000,000	<100	<250	<250	<250	<250	<250
1,2-Dichlorobenzene	14,000	360	210,000 (C)	210,000 (C)	210,000	<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	170	1,100	ID	170,000 (C)	170,000	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	1,700	290	19,000	400,000	NA	<100	<100	<100	<100	<100	<100
Dichlorodifluoromethane	95,000	ID	900,000	1,000,000 (C)	1,000,000	<100	<250	<250	<250	<250	<250
1,1-Dichloroethane	18,000	15,000	230,000	890,000 (C)	890,000	<50	<50	<50	<50	<50	<50
1,2-Dichloroethane	100	7,200 (X)	2,100	91,000	1,200,000	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	140	1,300 (X)	62	200,000	570,000	<50	<50	<50	<50	<50	<50
cis-1,2-Dichloroethene	1,400	12,000	22,000	640,000 (C)	640,000	<50	<50	140	<50	<50	<50
trans-1,2-Dichloroethene	2,000	30,000	23,000	1,400,000 (C)	1,400,000	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane	100	5,800 (X)	4,000	140,000	550,000	<50	<50	<50	<50	<50	<50
cis-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,4-Dichloro-2-butene	-	-	-	-	-	<50	-	-	-	-	-
Diethyl ether	200	ID	7,400,000	7,400,000	7,400,000	<250	-	-	-	-	-
Ethyl benzene	1,500	360	87,000	140,000 (C)	140,000	<50	<50	<50	<50	<50	<50
Ethylene Dibromide	250 (M)	250 (M)	670	250 (M)	890,000	<50	<20	<20	<20	<20	<20
Hexachloroethane	430	1,800 (X)	40,000	230,000	NA	<100	-	-	-	-	-
2-Hexanone	20,000	NA	990,000	2,500,000 (C)	44,000	<250	<2500	<2500	<2500	<2500	<2500
Methyl iodide	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Isopropylbenzene	91,000	ID	390,000 (C)	390,000 (C)	390,000	<100	<250	<250	<250	<250	<250
4-Methyl-2-pentanone	36,000	ID	2,700,000 (C)	2,700,000 (C)	2,700,000	<250	<2500	<2500	<2500	<2500	<2500
Methylene chloride	100	19,000 (X)	45,000	1,300,000	2,300,000	<250	<100	<100	<100	<100	<100
2-Methylnaphthalene	57,000	ID	ID	8,100,000	NA	<250	<330	<330	<330	<330	<330
Methyl (tert)butyl ether	800	15,000 (X)	5,900,000 (C)	1,500,000	5,900,000	<250	<250	<250	<250	<250	<250
Naphthalene	35,000	870	250,000	16,000,000	NA	<250	<330	<330	<330	<330	<330
n-Propylbenzene	1,600	NA	ID	2,500,000	10,000,000	<100	<100	<100	<100	<100	<100
Styrene	2,700	2,200	250,000	400,000	520,000	<50	<50	<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	1,500	ID (X)	6,200	440,000 (C)	440,000	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	170	1,600 (X)	4,300	53,000	870,000	<100	<50	<50	<50	<50	<50
Tetrachloroethene	100	900 (X)	11,000	88,000 (C)	88,000	440	31,000	100,000	47,000	41,000	32,000
Toluene	16,000	2,800	250,000 (C)	250,000 (C)	250,000	<50	<100	<100	<100	<100	<100
1,2,3-Trichlorobenzene	-	-	-	-	-	<250	-	-	-	-	-
1,2,4-Trichlorobenzene	4,200	1,800	1,100,000 (C)	990,000 (DD)	1,100,000	<250	<330	<330	<330	<330	<330
1,1,1-Trichloroethane	4,000	4,000	250,000	460,000 (C)	460,000	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	100	6,600 (X)	4,600	180,000	920,000	<50	<50	<50	<50	<50	<50
Trichloroethene	100	4,000 (X)	7,100	500,000 (C,DD)	500,000	<50	96	180	79	<50	<50
Trichlorofluoromethane	52,000	NA	560,000 (C)	560,000 (C)	560,000	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	840	NA	ID	830,000 (C)	830,000	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	2,100	570	110,000 (C)	110,000 (C)	110,000	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	1,800	1,100	94,000 (C)	94,000 (C)	94,000	<100	<100	<100	<100	<100	<100
Vinyl chloride	40	300	270	3,800	490,000	<40	<40	<40	<40	<40	<40
Xylenes	5,600	700	150,000 (C)	150,000 (C)	150,000	<150	<150	<150	<150	<150	<150

*Per Operational Memorandum #1, Revised December 10, 2004

- Parameter not tested for at his location.

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NA-Not available.

C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

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X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source.

Table 1 Summary of Soil Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Groundwater		Soil		Soil Saturation Concentration Screening Levels*	Soil Saturation					
	Drinking Water Protection Criteria*	Surface Water Interface Protection Criteria*	Volatilization to Indoor Air Inhalation Criteria*	Direct Contact Criteria*		AP-SS-11 2'	AP-SS-11 3.5-4'	AP-SS-12 2-3'	AP-SS-12 5-6'	AP-SS-13 1-2'	AP-SS-13 5-6'
Acetone	15,000	34,000	110,000,000 (C)	23,000,000	110,000,000	<1000	<1000	<1000	<1000	<1000	<1000
Acrylonitrile	52	98 (X)	6,600	16,000	8,300,000	<100	<100	<100	<100	<100	<100
Benzene	100	4,000 (X)	1,600	180,000	400,000	<50	<50	<50	<50	<50	<50
Bromobenzene	550	NA	310,000	540,000	760,000	<100	<100	<100	<100	<100	<100
Bromochloromethane	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Bromodichloromethane	1,600 (W)	ID	1,200	110,000	1,500,000	<100	<100	<100	<100	<100	<100
Bromoform	1,600 (W)	ID	150,000	820,000	870,000	<100	<100	<100	<100	<100	<100
Bromomethane	200	700	860	320,000	2,200,000	<250	<250	<250	<250	<250	<250
2-Butanone	260,000	44,000	27,000,000 (C)	27,000,000 (C,DD)	27,000,000	<750	<750	<750	<750	<750	<750
n-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<50
sec-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<50
tert-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50	<50	<50	<50	<50
Carbon disulfide	16,000	ID	76,000	280,000 (C,DD)	280,000	<250	<250	<250	<250	<250	<250
Carbon tetrachloride	100	900 (X)	190	96,000	390,000	<50	<50	<50	<50	<50	<50
Chlorobenzene	2,000	940	120,000	260,000 (C)	260,000	<50	<50	<50	<50	<50	<50
Chloroethane	8,600	ID	950,000 (C)	950,000 (C)	950,000	<250	<250	<250	<250	<250	<250
Chloroform	1,600 (W)	3,400 (X)	7,200	1,200,000	1,500,000	<50	<50	<50	<50	<50	<50
Chloromethane	5,200	ID	2,300	1,100,000 (C)	1,100,000	<250	<250	<250	<250	<250	<250
2-Chlorotoluene	3,300	NA	270,000	500,000	500,000	<50	<50	<50	<50	<50	<50
Dibromochloromethane	1,600 (W)	ID	3,900	110,000	610,000	<100	<100	<100	<100	<100	<100
1,2-Dibromo-3-chloropropane	-	-	-	-	-	<10	<10	<10	<10	<10	<10
Dibromomethane	1,600	NA	ID	2,000,000 (C)	2,000,000	<250	<250	<250	<250	<250	<250
1,2-Dichlorobenzene	14,000	360	210,000 (C)	210,000 (C)	210,000	<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	170	1,100	ID	170,000 (C)	170,000	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	1,700	290	19,000	400,000	NA	<100	<100	<100	<100	<100	<100
Dichlorodifluoromethane	95,000	ID	900,000	1,000,000 (C)	1,000,000	<250	<250	<250	<250	<250	<250
1,1-Dichloroethane	18,000	15,000	230,000	890,000 (C)	890,000	<50	<50	<50	<50	<50	<50
1,2-Dichloroethane	100	7,200 (X)	2,100	91,000	1,200,000	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	140	1,300 (X)	62	200,000	570,000	<50	<50	<50	<50	<50	<50
cis-1,2-Dichloroethene	1,400	12,000	22,000	640,000 (C)	640,000	<50	<50	<50	<50	<50	<50
trans-1,2-Dichloroethene	2,000	30,000	23,000	1,400,000 (C)	1,400,000	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane	100	5,800 (X)	4,000	140,000	550,000	<50	<50	<50	<50	<50	<50
cis-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,3-Dichloropropene	-	-	-	-	-	<50	<50	<50	<50	<50	<50
trans-1,4-Dichloro-2-butene	-	-	-	-	-	-	-	-	-	-	-
Diethyl ether	200	ID	7,400,000	7,400,000	7,400,000	-	-	-	-	-	-
Ethyl benzene	1,500	360	87,000	140,000 (C)	140,000	<50	<50	<50	<50	<50	<50
Ethylene Dibromide	250 (M)	250 (M)	670	250 (M)	890,000	<20	<20	<20	<20	<20	<20
Hexachloroethane	430	1,800 (X)	40,000	230,000	NA	-	-	-	-	-	-
2-Hexanone	20,000	NA	990,000	2,500,000 (C)	44,000	<2500	<2500	<2500	<2500	<2500	<2500
Methyl iodide	-	-	-	-	-	<100	<100	<100	<100	<100	<100
Isopropylbenzene	91,000	ID	390,000 (C)	390,000 (C)	390,000	<250	<250	<250	<250	<250	<250
4-Methyl-2-pentanone	36,000	ID	2,700,000 (C)	2,700,000 (C)	2,700,000	<2500	<2500	<2500	<2500	<2500	<2500
Methylene chloride	100	19,000 (X)	45,000	1,300,000	2,300,000	<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	57,000	ID	ID	8,100,000	NA	<330	<330	<330	<330	<330	<330
Methyl (tert)butyl ether	800	15,000 (X)	5,900,000 (C)	1,500,000	5,900,000	<250	<250	<250	<250	<250	<250
Naphthalene	35,000	870	250,000	16,000,000	NA	<330	<330	<330	<330	<330	<330
n-Propylbenzene	1,600	NA	ID	2,500,000	10,000,000	<100	<100	<100	<100	<100	<100
Styrene	2,700	2,200	250,000	400,000	520,000	<50	<50	<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	1,500	ID (X)	6,200	440,000 (C)	440,000	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	170	1,600 (X)	4,300	53,000	870,000	<50	<50	<50	<50	<50	<50
Tetrachloroethene	100	900 (X)	11,000	88,000 (C)	88,000	28,000	42,000	740	560	1,300	1,500
Toluene	16,000	2,800	250,000 (C)	250,000 (C)	250,000	<100	<100	<100	<100	<100	<100
1,2,3-Trichlorobenzene	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	4,200	1,800	1,100,000 (C)	990,000 (DD)	1,100,000	<330	<330	<330	<330	<330	<330
1,1,1-Trichloroethane	4,000	4,000	250,000	460,000 (C)	460,000	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	100	6,600 (X)	4,600	180,000	920,000	<50	<50	<50	<50	<50	<50
Trichloroethene	100	4,000 (X)	7,100	500,000 (C,DD)	500,000	89	180	<50	<50	<50	<50
Trichlorofluoromethane	52,000	NA	560,000 (C)	560,000 (C)	560,000	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	840	NA	ID	830,000 (C)	830,000	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	2,100	570	110,000 (C)	110,000 (C)	110,000	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	1,800	1,100	94,000 (C)	94,000 (C)	94,000	<100	<100	<100	<100	<100	<100
Vinyl chloride	40	300	270	3,800	490,000	<40	<40	<40	<40	<40	<40
Xylenes	5,600	700	150,000 (C)	150,000 (C)	150,000	<150	<150	<150	<150	<150	<150

*Per Operational Memorandum #1, Revised December 10, 2004.

- Parameter not tested for at his location.

ID-Inadequate data to develop criterion.

NA-Not available.

C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (C_{sat})

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source.

Table 1 Summary of Soil Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Groundwater		Soil		Soil Saturation Concentration Screening Levels*	Dup 5-6' 2/20/06	Meth Blank Dup 2/20/06
	Drinking Water Protection Criteria*	Surface Water Interface Protection Criteria*	Volatilization to Indoor Air Inhalation Criteria*	Direct Contact Criteria*			
Acetone	15,000	34,000	110,000,000 (C)	23,000,000	110,000,000	<1000	<1000
Acrylonitrile	52	98 (X)	6,600	16,000	8,300,000	<100	<100
Benzene	100	4,000 (X)	1,600	180,000	400,000	<50	<50
Bromobenzene	550	NA	310,000	540,000	760,000	<100	<100
Bromochloromethane	-	-	-	-	-	<100	<100
Bromodichloromethane	1,600 (W)	ID	1,200	110,000	1,500,000	<100	<100
Bromoform	1,600 (W)	ID	150,000	820,000	870,000	<100	<100
Bromomethane	200	700	860	320,000	2,200,000	<250	<250
2-Butanone	260,000	44,000	27,000,000 (C)	27,000,000 (C,DD)	27,000,000	<750	<750
n-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50
sec-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50
tert-Butylbenzene	1,600	ID	ID	2,500,000	10,000,000	<50	<50
Carbon disulfide	16,000	ID	76,000	280,000 (C,DD)	280,000	<250	<250
Carbon tetrachloride	100	900 (X)	190	96,000	390,000	<50	<50
Chlorobenzene	2,000	940	120,000	260,000 (C)	260,000	<50	<50
Chloroethane	8,600	ID	950,000 (C)	950,000 (C)	950,000	<250	<250
Chloroform	1,600 (W)	3,400 (X)	7,200	1,200,000	1,500,000	<50	<50
Chloromethane	5,200	ID	2,300	1,100,000 (C)	1,100,000	<250	<250
2-Chlorotoluene	3,300	NA	270,000	500,000	500,000	<50	<50
Dibromochloromethane	1,600 (W)	ID	3,900	110,000	610,000	<100	<100
1,2-Dibromo-3-chloropropane	-	-	-	-	-	<10	<10
Dibromomethane	1,600	NA	ID	2,000,000 (C)	2,000,000	<250	<250
1,2-Dichlorobenzene	14,000	360	210,000 (C)	210,000 (C)	210,000	<100	<100
1,3-Dichlorobenzene	170	1,100	ID	170,000 (C)	170,000	<100	<100
1,4-Dichlorobenzene	1,700	290	19,000	400,000	NA	<100	<100
Dichlorodifluoromethane	95,000	ID	900,000	1,000,000 (C)	1,000,000	<250	<250
1,1-Dichloroethane	18,000	15,000	230,000	890,000 (C)	890,000	<50	<50
1,2-Dichloroethane	100	7,200 (X)	2,100	91,000	1,200,000	<50	<50
1,1-Dichloroethene	140	1,300 (X)	62	200,000	570,000	<50	<50
cis-1,2-Dichloroethene	1,400	12,000	22,000	640,000 (C)	640,000	<50	<50
trans-1,2-Dichloroethene	2,000	30,000	23,000	1,400,000 (C)	1,400,000	<50	<50
1,2-Dichloropropane	100	5,800 (X)	4,000	140,000	550,000	<50	<50
cis-1,3-Dichloropropene	-	-	-	-	-	<50	<50
trans-1,3-Dichloropropene	-	-	-	-	-	<50	<50
trans-1,4-Dichloro-2-butene	-	-	-	-	-	~	~
Diethyl ether	200	ID	7,400,000	7,400,000	7,400,000	~	~
Ethyl benzene	1,500	360	8,000	140,000 (C)	140,000	<50	<50
Ethylene Dibromide	250 (M)	250 (M)	670	250 (M)	890,000	<20	<20
Hexachloroethane	430	1,800 (X)	40,000	230,000	NA	~	~
2-Hexanone	20,000	NA	990,000	2,500,000 (C)	44,000	<2500	<2500
Methyl iodide	-	-	-	-	-	<100	<100
Isopropylbenzene	91,000	ID	390,000 (C)	390,000 (C)	390,000	<250	<250
4-Methyl-2-pentanone	36,000	ID	2,700,000 (C)	2,700,000 (C)	2,700,000	<2500	<2500
Methylene chloride	100	19,000 (X)	45,000	1,300,000	2,300,000	<100	<100
2-Methylnaphthalene	57,000	ID	ID	8,100,000	NA	<330	<330
Methyl (tert)butyl ether	800	15,000 (X)	5,900,000 (C)	1,500,000	5,900,000	<250	<250
Naphthalene	35,000	870	250,000	16,000,000	NA	<330	<330
n-Propylbenzene	1,600	NA	ID	2,500,000	10,000,000	<100	<100
Styrene	2,700	2,200	250,000	400,000	520,000	<50	<50
1,1,1,2-Tetrachloroethane	1,500	ID (X)	6,200	440,000 (C)	440,000	<100	<100
1,1,2,2-Tetrachloroethane	170	1,600 (X)	4,300	53,000	870,000	<50	<50
Tetrachloroethene	100	900 (X)	11,000	88,000 (C)	88,000	620	<50
Toluene	16,000	2,800	250,000 (C)	250,000 (C)	250,000	<100	<100
1,2,3-Trichlorobenzene	-	-	-	-	-	~	~
1,2,4-Trichlorobenzene	4,200	1,800	1,100,000 (C)	990,000 (DD)	1,100,000	<330	<330
1,1,1-Trichloroethane	4,000	4,000	250,000	460,000 (C)	460,000	<50	<50
1,1,2-Trichloroethane	100	6,600 (X)	4,600	180,000	920,000	<50	<50
Trichloroethene	100	4,000 (X)	7,100	500,000 (C,DD)	500,000	<50	<50
Trichlorofluoromethane	52,000	NA	560,000 (C)	560,000 (C)	560,000	<100	<100
1,2,3-Trichloropropane	840	NA	ID	830,000 (C)	830,000	<100	<100
1,2,4-Trimethylbenzene	2,100	570	110,000 (C)	110,000 (C)	110,000	<100	<100
1,3,5-Trimethylbenzene	1,800	1,100	94,000 (C)	94,000 (C)	94,000	<100	<100
Vinyl chloride	40	300	270	3,800	490,000	<40	<40
Xylenes	5,600	700	150,000 (C)	150,000 (C)	150,000	<150	<150

*Per Operational Memorandum #1, Revised December 10, 2004.

~ Parameter not tested for at his location.

ID-Inadequate data to develop criterion.

NA-Not available

C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L.

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source.

Table 2 Summary of Groundwater Sample Analytical Results

Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Residential & Commercial I Drinking Water	Groundwater Surface Water Interface	Residential & Commercial I Groundwater Volatilization to Indoor Air Inhalation	SP1	SP2	SP4	SP5	SP6	SP7	SP8	SP9	SP4	SP5
	Criteria*	Criteria*	Criteria*	10/17/03	10/17/03	11/11/04	11/11/04	11/11/04	11/11/04	11/16/04	11/16/04	2/18/06	2/18/06
Acetone	730	1,700	1,000,000,000	<25	<25	<1300	<25	<25	<25	<25	<25	<1000	<50
Acrylonitrile	2.6	4.9 (X)	34,000	<1	<1	<50	<1	<1	<1	<1	<1	<40	<2
Benzene	5.0 (A)	200 (X)	5,600	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Bromobenzene	18	NA	180,000	~	~	~	~	~	~	~	~	<20	<1
Bromochloromethane	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Bromodichloromethane	100 (A,W)	ID	4,800	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Bromoform	100 (A,W)	ID	470,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Bromomethane	10	35	4,000	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
2-Butanone	13,000	2,200	240,000,000 (S)	<5	<5	<300	<5	<5	<5	<5	<5	<500	<25
n-Butylbenzene	80	ID	ID	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
sec-Butylbenzene	80	ID	ID	~	~	~	~	~	~	~	~	<20	<1
tert-Butylbenzene	80	ID	ID	~	~	~	~	~	~	~	~	<20	<1
Carbon disulfide	800	ID	250,000	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
Carbon tetrachloride	5.0 (A)	45 (X)	370	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Chlorobenzene	100 (A)	47	210,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Chloroethane	430	ID	5,700,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
Chloroform	100 (A,W)	170 (X)	28,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Chloromethane	260	ID	8,600	<1	<1	<50	<1	<1	<1	<1	<1	<10	<5
2-Chlorotoluene	150	ID	220,000	~	~	~	~	~	~	~	~	<100	<5
Dibromochloromethane	100 (A,W)	ID	14,000	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
1,2-Dibromo-3-chloropropane	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Dibromomethane	80	NA	ID	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
1,2-Dichlorobenzene	600 (A)	16	160,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,3-Dichlorobenzene	6.6	38	ID	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,4-Dichlorobenzene	75 (A)	13	16,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Dichlorodifluoromethane	1,700	ID	220,000	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
1,1-Dichloroethane	880	740	1,000,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,2-Dichloroethane	5.0 (A)	360 (X)	9,600	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,1-Dichloroethene	7.0 (A)	65 (X)	200	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
cis-1,2-Dichloroethene	70 (A)	620	93,000	38	2	1,600	11	10	2	4	3	930	<1
trans-1,2-Dichloroethene	100 (A)	1500	85,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,2-Dichloropropane	5.0 (A)	290 (X)	16,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
cis-1,3-Dichloropropene	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
trans-1,3-Dichloropropene	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
trans-1,4-Dichloro-2-butene	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	~	~
Diethyl ether	1.0 (E,M)	ID	61,000,000	<10	<10	<500	<10	<10	<10	<10	<10	<20	<1
Ethyl benzene	74 (E)	18	110,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Ethylene Dibromide	1.0 (A,M)	1.0 (M)	2,400	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
2-Hexanone	1,000	NA	4,200,000	<5	<5	<300	<5	<5	<5	<5	<5	<1000	<50
Hexachloroethane	7.3	6.7 (X)	27,000	<1	<1	<50	<1	<1	<1	<1	<1	~	~
Methyl iodide	-	-	-	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Isopropylbenzene	800	ID	56,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<100	<5
4-Methyl-2-pentanone	1,800	ID	20,000,000 (S)	<5	<5	<300	<5	<5	<5	<5	<5	<1000	<50
Methylene chloride	5.0 (A)	940 (X)	220,000	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
2-Methylnaphthalene	260	ID	ID	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
Methyl (tert)butyl ether	40 (E)	730 (X)	47,000,000 (S)	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
Naphthalene	520	13	31,000 (S)	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
n-Propylbenzene	80	ID	ID	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Styrene	100 (A)	80	170,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,1,1,2-Tetrachloroethane	77	ID (X)	15,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,1,2,2-Tetrachloroethane	8.5	78 (X)	12,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Tetrachloroethene	5.0 (A)	45 (X)	25,000	<1	<1	5,900	160	9	12	11	280	2,900	10
Toluene	790 (E)	140	530,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,2,3-Trichlorobenzene	-	-	-	<5	<5	<300	<5	<5	<5	<5	<5	~	~
1,2,4-Trichlorobenzene	70 (A)	30	300,000 (S)	<5	<5	<300	<5	<5	<5	<5	<5	<100	<5
1,1,1-Trichloroethane	200 (A)	200	660,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,1,2-Trichloroethane	5.0 (A)	330 (X)	17,000	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Trichloroethene	5.0 (A)	200 (X)	15,000	<1	<1	1,200	3	4	3	<1	4	760	<1
Trichlorofluoromethane	2600	NA	1,100,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,2,3-Trichloropropane	42	NA	ID	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,2,4-Trimethylbenzene	63 (E)	17	56,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
1,3,5-Trimethylbenzene	72 (E)	45	61,000 (S)	<1	<1	<50	<1	<1	<1	<1	<1	<20	<1
Vinyl chloride	2.0 (A)	15	1,100	4	<1	77	<1	2	<1	<1	<1	<20	<1
Xylenes	280 (E)	35	190,000 (S)	<3	<3	<200	<3	<3	<3	<3	<3	<60	<3

*Per Operational Memorandum #1, Revised December 10, 2004.

~ Parameter not tested for at his location.

ID-Inadequate data to develop criterion.

NA-Not available.

A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

S-Criterion defaults to the hazardous substance-specific water solubility limit

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source

Table 2 Summary of Groundwater Sample Analytical Results
 Adrian Dry Cleaners
 Adrian, Michigan
 ASTI File No. 5894-17

Parameters	Residential & Commercial I	Groundwater	Residential & Commercial I	SP8	Dup1	Trip Blank
	Drinking Water	Surface Water	Groundwater			
	Criteria*	Interface	Volatilization to Indoor Air	2/18/06	2/18/06	2/18/06
	Criteria*	Criteria*	Inhalation Criteria*			
Acetone	730	1,700	1,000,000,000	<50	<50	<50
Acrylonitrile	2.6	4.9 (X)	34,000	<2	<2	<2
Benzene	5.0 (A)	200 (X)	5,600	<1	<1	<1
Bromobenzene	18	NA	180,000	<1	<1	<1
Bromochloromethane	-	-	-	<1	<1	<1
Bromodichloromethane	100 (A,W)	ID	4,800	<1	<1	<1
Bromoform	100 (A,W)	ID	470,000	<1	<1	<1
Bromomethane	10	35	4,000	<5	<5	<5
2-Butanone	13,000	2,200	240,000,000 (S)	<2.5	<2.5	<2.5
n-Butylbenzene	80	ID	ID	<1	<1	<1
sec-Butylbenzene	80	ID	ID	<1	<1	<1
tert-Butylbenzene	80	ID	ID	<1	<1	<1
Carbon disulfide	800	ID	250,000	<5	<5	<5
Carbon tetrachloride	5.0 (A)	45 (X)	370	<1	<1	<1
Chlorobenzene	100 (A)	47	210,000	<1	<1	<1
Chloroethane	430	ID	5,700,000 (S)	<5	<5	<5
Chloroform	100 (A,W)	170 (X)	28,000	<1	<1	<1
Chloromethane	260	ID	8,600	<5	<5	<5
2-Chlorotoluene	150	ID	220,000	<5	<5	<5
Dibromochloromethane	100 (A,W)	ID	14,000	<5	<5	<5
1,2-Dibromo-3-chloropropane	-	-	-	<1	<1	<1
Dibromomethane	80	NA	ID	<5	<5	<5
1,2-Dichlorobenzene	600 (A)	16	160,000 (S)	<1	<1	<1
1,3-Dichlorobenzene	6.6	38	ID	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	13	16,000	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	<5	<5	<5
1,1-Dichloroethane	880	740	1,000,000	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360 (X)	9,600	<1	<1	<1
1,1-Dichloroethene	7.0 (A)	65 (X)	200	<1	<1	<1
cis-1,2-Dichloroethene	70 (A)	620	93,000	<1	<1	<1
trans-1,2-Dichloroethene	100 (A)	1500	85,000	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	290 (X)	16,000	<1	<1	<1
cis-1,3-Dichloropropene	-	-	-	<1	<1	<1
trans-1,3-Dichloropropene	-	-	-	<1	<1	<1
trans-1,4-Dichloro-2-butene	-	-	-	-	-	-
Diethyl ether	1.0 (E,M)	ID	61,000,000	-	-	-
Ethyl benzene	74 (E)	18	110,000	<1	<1	<1
Ethylene Dibromide	1.0 (A,M)	1.0 (M)	2,400	<1	<1	<1
2-Hexanone	1,000	NA	4,200,000	<50	<50	<50
Hexachloroethane	7.3	6.7 (X)	27,000	-	-	-
Methyl iodide	-	-	-	<1	<1	<1
Isopropylbenzene	800	ID	56,000 (S)	<5	<5	<5
4-Methyl-2-pentanone	1,800	ID	20,000,000 (S)	<50	<50	<50
Methylene chloride	5.0 (A)	940 (X)	220,000	<5	<5	<5
2-Methylnaphthalene	260	ID	ID	<5	<5	<5
Methyl (tert)butyl ether	40 (E)	730 (X)	47,000,000 (S)	<5	<5	<5
Naphthalene	520	13	31,000 (S)	<5	<5	<5
n-Propylbenzene	80	ID	ID	<1	<1	<1
Styrene	100 (A)	80	170,000	<1	<1	<1
1,1,1,2-Tetrachloroethane	77	ID (X)	15,000	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78 (X)	12,000	<1	<1	<1
Tetrachloroethene	5.0 (A)	45 (X)	25,000	13	8.6	<1
Toluene	790 (E)	140	530,000 (S)	<1	<1	<1
1,2,3-Trichlorobenzene	-	-	-	-	-	-
1,2,4-Trichlorobenzene	70 (A)	30	300,000 (S)	<5	<5	<5
1,1,1-Trichloroethane	200 (A)	200	660,000	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330 (X)	17,000	<1	<1	<1
Trichloroethene	5.0 (A)	200 (X)	15,000	<1	<1	<1
Trichlorofluoromethane	2600	NA	1,100,000 (S)	<1	<1	<1
1,2,3-Trichloropropane	42	NA	ID	<1	<1	<1
1,2,4-Trimethylbenzene	63 (E)	17	56,000 (S)	<1	<1	<1
1,3,5-Trimethylbenzene	72 (E)	45	61,000 (S)	<1	<1	<1
Vinyl chloride	2.0 (A)	15	1,100	<1	<1	<1
Xylenes	280 (E)	35	190,000 (S)	<3	<3	<3

*Per Operational Memorandum #1, Revised December 10, 2004

- Parameter not tested for at this location.

ID-Inadequate data to develop criterion.

NA-Not available.

A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

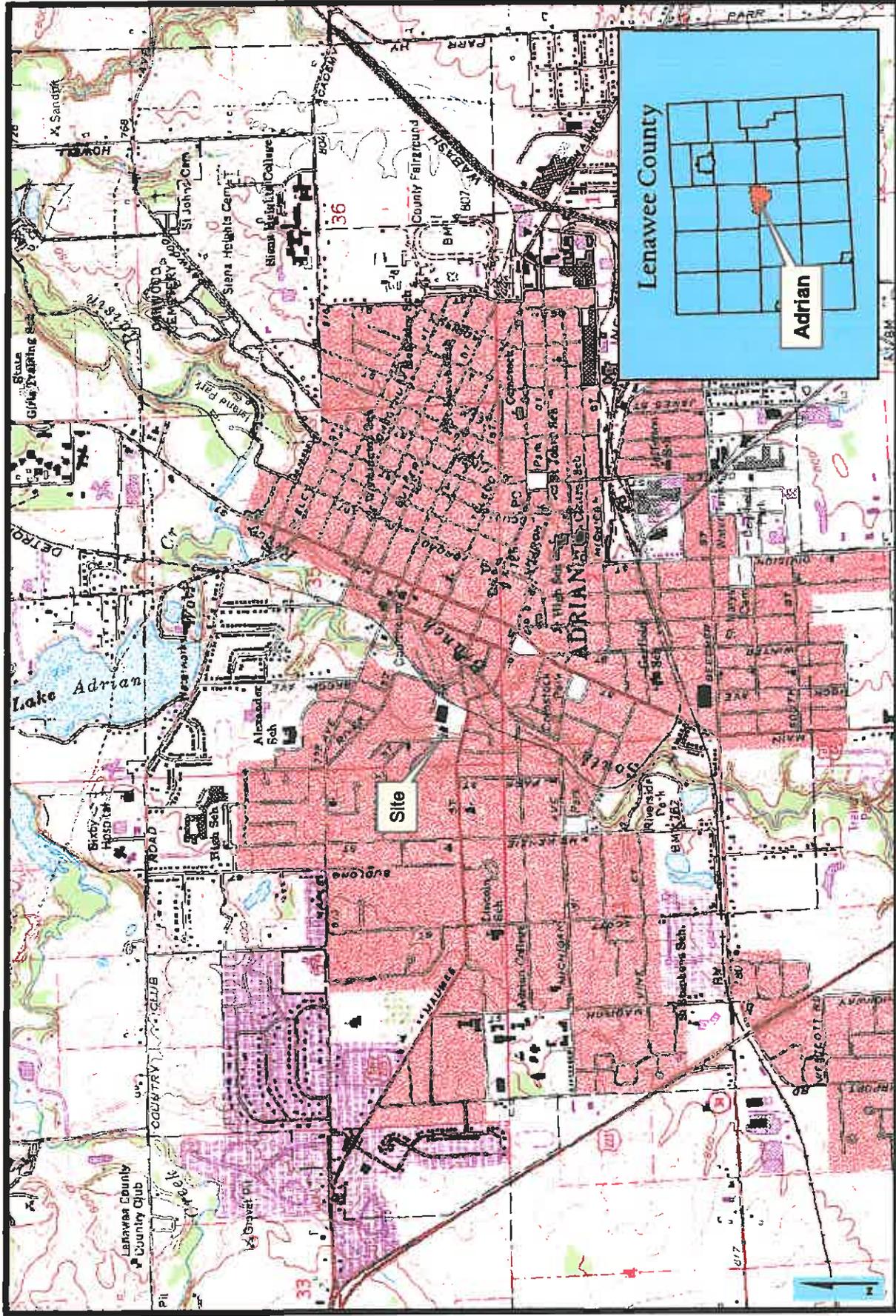
M-Calculated criterion is below the analytical target detection limit, therefore, the criterion is the target detection limit.

S-Criterion defaults to the hazardous substance-specific water solubility limit.

W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 100 ug/L.

X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria table is not protective for surface water that is used as a drinking water source.

Figures

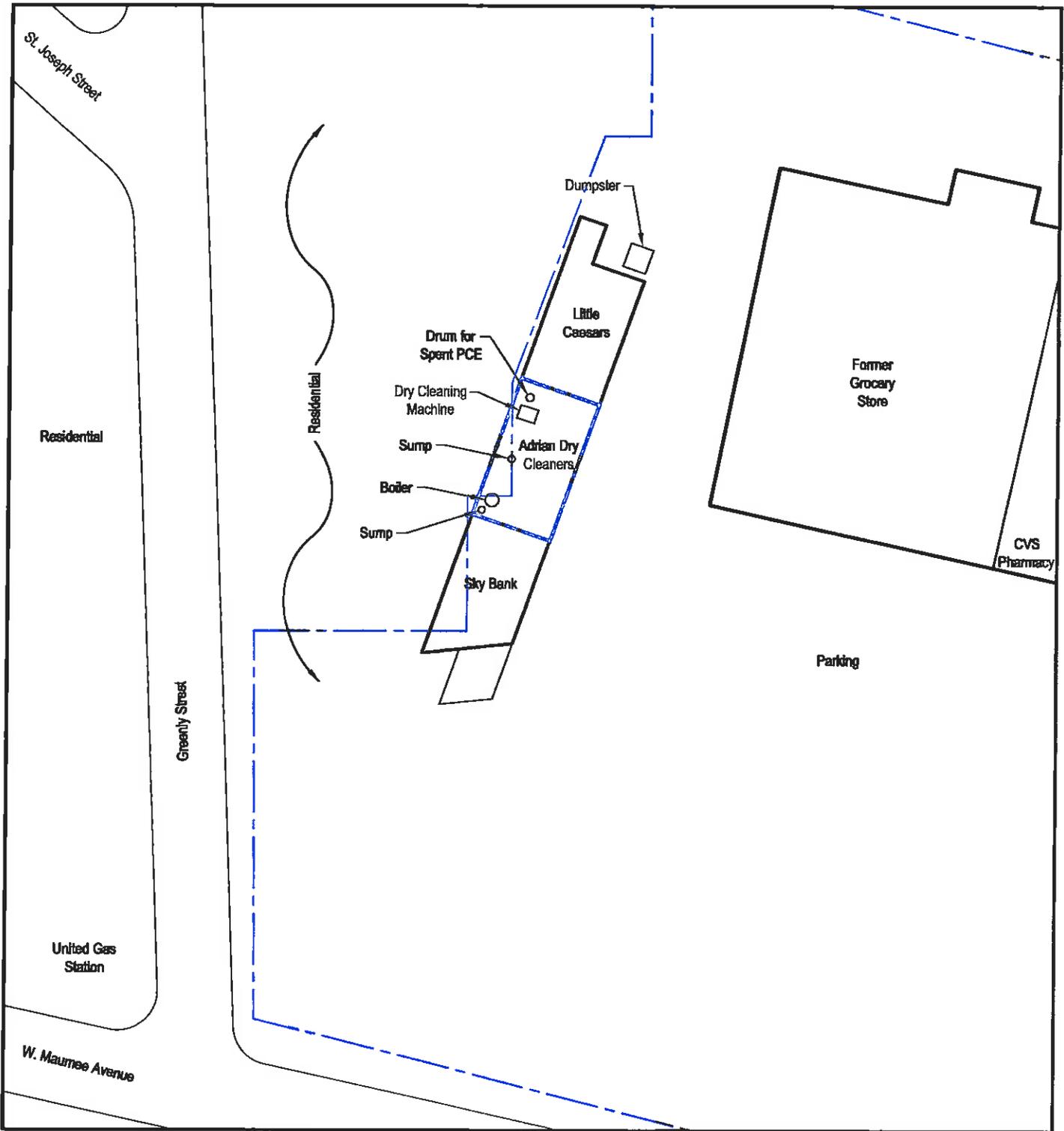


Adrian, Michigan

444 West Maumee Avenue

Created for: SE Michigan Cleaners, Inc.
 Created by: ALH, March 30, 2006, ASTI Project 5894-17

Site Location Map



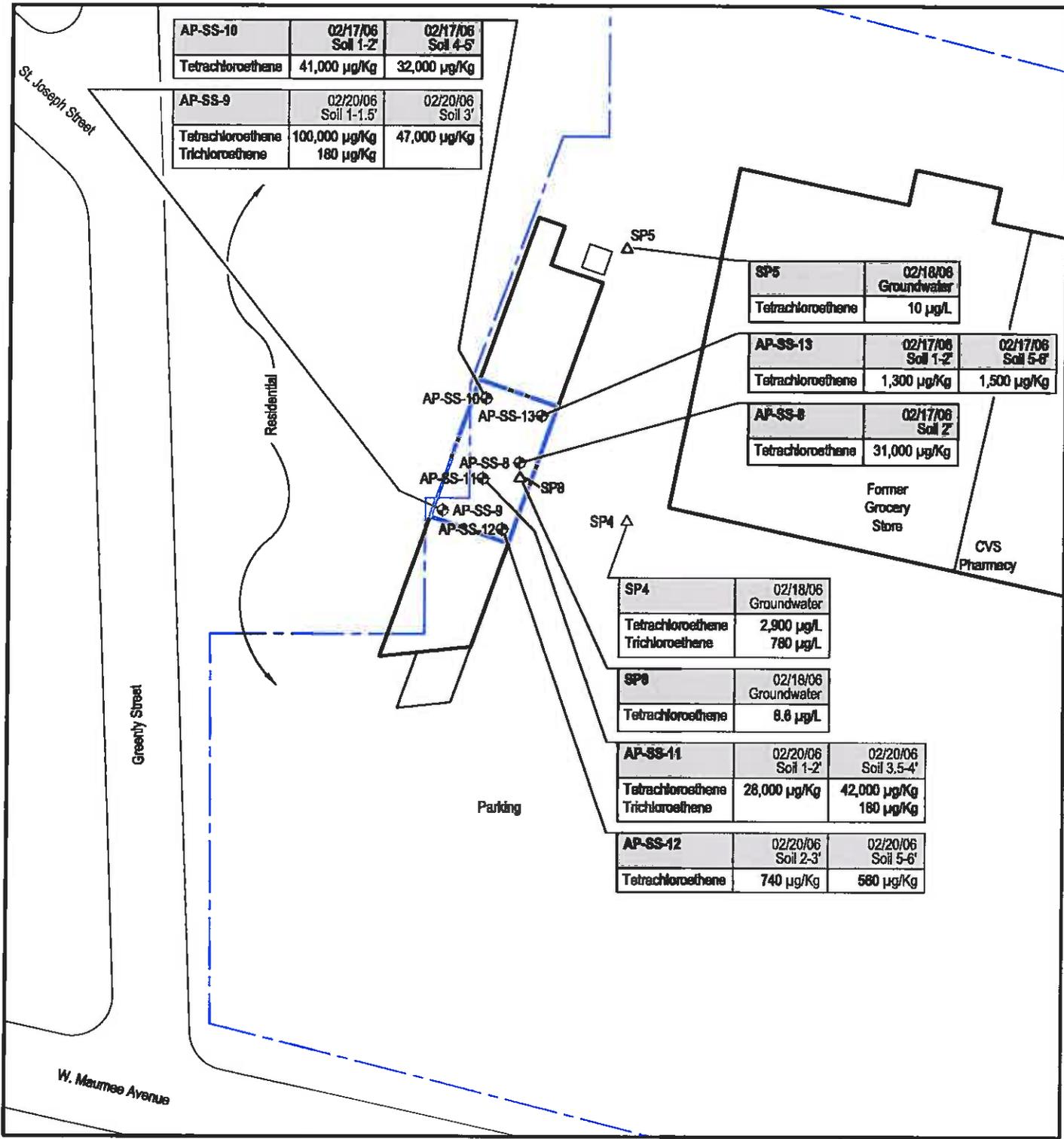
LEGEND
 - - - - - Property Line
 - - - - - Parcel Line

444 W. Maumee Avenue, Adrian, MI



Created for: SE Michigan Cleaners, Inc.
 ASTI Project 5894-17, JMD, March 22, 2006

Figure 2 - Site Detail Map



AP-SS-10	02/17/06 Soil 1-2'	02/17/06 Soil 4-5'
Tetrachloroethene	41,000 µg/Kg	32,000 µg/Kg

AP-SS-9	02/20/06 Soil 1-1.5'	02/20/06 Soil 3'
Tetrachloroethene	100,000 µg/Kg	47,000 µg/Kg
Trichloroethene	180 µg/Kg	

SP5	02/18/06 Groundwater
Tetrachloroethene	10 µg/L

AP-SS-13	02/17/06 Soil 1-2'	02/17/06 Soil 5-8'
Tetrachloroethene	1,300 µg/Kg	1,500 µg/Kg

AP-SS-8	02/17/06 Soil 2'
Tetrachloroethene	31,000 µg/Kg

SP4	02/18/06 Groundwater
Tetrachloroethene	2,900 µg/L
Trichloroethene	780 µg/L

SP8	02/18/06 Groundwater
Tetrachloroethene	8.8 µg/L

AP-SS-11	02/20/06 Soil 1-2'	02/20/06 Soil 3.5-4'
Tetrachloroethene	28,000 µg/Kg	42,000 µg/Kg
Trichloroethene	180 µg/Kg	

AP-SS-12	02/20/06 Soil 2-3'	02/20/06 Soil 5-6'
Tetrachloroethene	740 µg/Kg	580 µg/Kg



- LEGEND**
- Property Line
 - Parcel Line
 - ⊕ Soil Borings
 - △ Monitoring Wells



444 W. Maumee Avenue, Adrian, MI

Created for: SE Michigan Cleaners, Inc.
ASTI Project 5894-17, JMD, March 22, 2006

Figure 3 - Site Map with Soil Boring Locations and Analytical Results

Attachment A

Material Safety Data Sheets - Perchloroethylene

Material Safety Data Sheet for Perchloroethylene (Perc)

1 - PRODUCT IDENTIFICATION

PRODUCT NAME: TETRACHLOROETHYLENE
FORMULA: CL₂C:CCL₂
FORMULA WT: 165.83
CAS NO.: 00127-18-4
NIOSH/RTECS NO.: KX3850000
COMMON SYNONYMS: PERCHLOROETHYLENE; ETHYLENE
TETRACHLORIDE; CARBON BICHLORIDE; CARBON
DICHLORIDE
PRODUCT CODES: 9218, 9453, 5380, 9465

EFFECTIVE: 02/12/87
REVISION #03

PRECAUTIONARY LABELING

BAKER SAF-T-DATA(TM) SYSTEM
HAZARD RATINGS ARE 0 TO 4 (0=NO HAZARD; 4=EXTREME
HAZARD).

HEALTH - 3 SEVERE (CANCER CAUSING)
FLAMMABILITY - 0 NONE
REACTIVITY - 0 NONE
CONTACT - 3 SEVERE (LIFE)

LABORATORY PROTECTIVE EQUIPMENT

GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;
PROPER GLOVES

PRECAUTIONARY LABEL STATEMENTS

DANGER: HARMFUL IF SWALLOWED OR INHALED

EXCEPTIONAL HEALTH AND CONTACT HAZARDS - READ
MATERIAL SAFETY DATA SHEET
NOTE: REPORTED AS CAUSING CANCER IN LABORATORY
ANIMALS. EXERCISE DUE CARE.

NOTE: THIS MATERIAL OR ITS VAPORS IN CONTACT WITH FLAMES OR HOT GLOWING SURFACES MAY FORM CORROSIVE ACID FUMES.

KEEP AWAY FROM HEAT, SPARKS, FLAME. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID BREATHING VAPOR. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

SAF-T-DATA(TM) STORAGE COLOR CODE: BLUE (HEALTH)

2 - HAZARDOUS COMPONENTS

COMPONENT	%	CAS NO.
TETRACHLOROETHYLENE	90-100	127-18-4

3 - PHYSICAL DATA

BOILING POINT: 121 C (250 F) VAPOR PRESSURE(MM HG): 13
MELTING POINT: -22 C (-8 F) VAPOR DENSITY(AIR=1): 5.8
SPECIFIC GRAVITY: 1.62 EVAPORATION RATE: 2.80

(H2O=1) (BUTYL ACETATE=1)

SOLUBILITY(H2O): NEGLIGIBLE (LESS THAN 0.1 %) %
VOLATILES BY VOLUME: 100

APPEARANCE & ODOR: COLORLESS LIQUID WITH ETHER OR CHLOROFORM ODOR.

4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: CLOSED CUP N/A NFPA 704M RATING: 2-0-0

FLAMMABLE LIMITS: UPPER - N/A % LOWER - N/A %
FIRE EXTINGUISHING MEDIA: USE EXTINGUISHING MEDIA
APPROPRIATE FOR SURROUNDING FIRE.
SPECIAL FIRE-FIGHTING PROCEDURES: FIREFIGHTERS
SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-
CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE
OPERATED IN POSITIVE PRESSURE MODE.

MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE
WITHOUT RISK. USE WATER TO KEEP FIRE-EXPOSED
CONTAINERS COOL.

UNUSUAL FIRE & EXPLOSION HAZARDS: CLOSED
CONTAINERS EXPOSED TO HEAT MAY EXPLODE.

TOXIC GASES PRODUCED: HYDROGEN CHLORIDE,
PHOSGENE, CARBON MONOXIDE, CARBON DIOXIDE

5 - HEALTH HAZARD DATA

ACCEPTABLE MAXIMUM PEAK ABOVE THE ACCEPTANCE
CEILING CONCENTRATION FOR AN EIGHT-HOUR SHIFT=300
PPM FOR 5 MINUTES IN ANY 3 HOURS. (PEL) CEILING=200 PPM
THRESHOLD LIMIT VALUE (TLV/TWA): 335 MG/M3 (50 PPM)
SHORT-TERM EXPOSURE LIMIT (STEL): 1340 MG/M3 (200 PPM)
PERMISSIBLE EXPOSURE LIMIT (PEL): MG/M3 (100 PPM)
TOXICITY:

LD50 (ORAL-RAT)(MG/KG) - 8850
LD50 (IPR-MOUSE)(MG/KG) - 4700

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG:
NO

EFFECTS OF OVEREXPOSURE: INHALATION OF VAPORS MAY
CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS,
DROWSINESS, IRRITATION OF RESPIRATORY TRACT, AND
LOSS OF CONSCIOUSNESS. LIQUID MAY BE IRRITATING TO
SKIN AND EYES. PROLONGED SKIN CONTACT MAY RESULT IN
DERMATITIS. EYE CONTACT MAY RESULT IN TEMPORARY
CORNEAL DAMAGE.

INGESTION MAY CAUSE NAUSEA, VOMITING, HEADACHES,
DIZZINESS, GASTROINTESTINAL IRRITATION.

CHRONIC EFFECTS OF OVEREXPOSURE MAY INCLUDE
DAMAGE TO KIDNEYS, LIVER, LUNGS, BLOOD, OR CENTRAL

NERVOUS SYSTEM.

TARGET ORGANS: LIVER, KIDNEYS, EYES, UPPER
RESPIRATORY SYSTEM, CENTRAL NERVOUS SYSTEM

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY
EXPOSURE: NONE IDENTIFIED

ROUTES OF ENTRY: INHALATION, INGESTION, EYE CONTACT,
SKIN CONTACT

EMERGENCY AND FIRST AID PROCEDURES: CALL A
PHYSICIAN.

IF **SWALLOWED**, DO NOT INDUCE VOMITING.
IF **INHALED**, REMOVE TO FRESH AIR. IF NOT BREATHING,
GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS
DIFFICULT, GIVE OXYGEN.
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH
PLENTY OF WATER FOR AT LEAST 15 MINUTES. FLUSH
SKIN WITH WATER.
SOME EXPERIMENTS WITH TEST ANIMALS INDICATED
THAT THIS SUBSTANCE MAY BE ANTICIPATED TO BE A
CARCINOGEN.

6 - REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT
OCCUR CONDITIONS TO AVOID: HEAT, FLAME, OTHER
SOURCES OF IGNITION

INCOMPATIBLES: STRONG OXIDIZING AGENTS, ALKALI
METALS, ALUMINUM

DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE,
PHOSGENE, CARBON MONOXIDE, CARBON DIOXIDE

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR
DISCHARGE

WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS. TAKE UP WITH SAND OR OTHER NON-COMBUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER DISPOSAL. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER: U210 (TOXIC WASTE)

8 - PROTECTIVE EQUIPMENT

VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS.

b RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS UP TO 50 PPM, A CHEMICAL CARTRIDGE RESPIRATOR WITH> ORGANIC VAPOR CARTRIDGE IS RECOMMENDED. ABOVE THIS LEVEL, A SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED.

EYE/SKIN PROTECTION: SAFETY GOGGLES AND FACE SHIELD, UNIFORM, PROTECTIVE SUIT, POLYVINYL ALCOHOL GLOVES ARE RECOMMENDED.

9 - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA(TM) STORAGE COLOR CODE: BLUE (HEALTH)

SPECIAL PRECAUTIONS: KEEP CONTAINER TIGHTLY CLOSED. STORE IN SECURE POISON AREA. STORE IN A COOL, WELL-VENTILATED AREA AWAY FROM SOURCES OF HEAT, FLAME, OR IGNITION.

10 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: TETRACHLOROETHYLENE (AIR
ONLY)

HAZARD CLASS ORM-A

UN/NA UN1897

LABELS NONE

REPORTABLE QUANTITY 1 LBS.

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME TETRACHLOROETHYLENE

HAZARD CLASS 6.1

UN/NA UN1897

LABELS HARMFUL - STOW AWAY FROM FOOD STUFFS

Attachment B

Pavement Inspection Form

PAVEMENT INSPECTION

**444 W. Maumee Avenue
Adrian, Michigan**

Paved surfaces within the building are to be inspection annually. Any cracks or worn surfaces which could allow liquids to penetrate the floor are to be noted and repaired. The completed inspection forms, with records of repairs, will be filed by the maintenance supervisor.

Date of Inspection _____ **Inspector** _____

Dry Cleaning Area

Condition of concrete _____

Repairs needed? _____

Condition of epoxy coating _____

Repairs needed? _____

Condition of secondary containment _____

Repairs needed? _____

REPAIR RECORD

Describe repairs (patching, caulking, recoating, etc) and area:

Date Repairs Completed _____ **Completed :** _____

Attachment C
Spill Control Plan

SPILL CONTROL PLAN

**444 W. Maumee Avenue
Adrian, Michigan**

In the event of a spill, sudden release or leak of dry cleaning solvents, prompt action will be taken to minimize any adverse effect on the surrounding environment.

A spill control kit is located by the northwest corner of the building in the dry cleaning area. The spill kit contains absorbent tubes and pads to contain spills.

For spills less than 5 gallons, take the following actions:

1. Stop or contain the source of the spill, if possible – shut off valves, place buckets under leaking pipes, etc.
2. Contain or absorb spilled liquids using absorbent tubes or pads as appropriate.
3. Notify supervisor and workers in the dry cleaning area.
4. Dispose of used absorbent pads and tubes in sealed containers.
5. Arrange for proper disposal of absorbent materials.

For spills of more than five gallons, take the following actions:

1. Stop or contain the source of the spill – shut off valves, place buckets, etc.
2. Notify supervisor and workers in the dry cleaning area and clear the area.
3. Place absorbent tubes at any points where fluids could leave the dry cleaning area.
4. Arrange for cleanup contractor to remove spilled liquids. Local contractors are:

Bill Barr Inc. (517) 372-5548
EQ Industrial Services Inc. (734) 699-6230

Attachment D

Health and Safety Procedures for Excavations

HEALTH AND SAFETY PROCEDURES FOR EXCAVATIONS

444 W. Maumee Avenue
Adrian, Michigan

The soils and groundwater underlying the 444 W. Maumee Avenue property are contaminated with volatile organic compounds from past leakage or spillage of perchloroethylene. Specific contaminants are described in detail in the Baseline Environmental Assessment and Section 7a Compliance Analysis prepared for this property.

These health and safety procedures apply only to the presence of contaminants in soils and groundwater. Standard excavation and construction safety practices, as required by state and federal law, should be followed at all times.

1. Vapors in excavations should be monitored by an industrial hygienist or similarly trained person using a photoionization detector or similar direct reading instrument. If concentrations of organic vapors in air exceed acceptable levels, appropriate respirators should be worn.
2. Wear gloves, long pants, and long-sleeved shirts to avoid skin contact with contaminated soils.
3. If saturated soils are encountered, wear waterproof boots and gloves.
4. Do not eat, drink, or smoke in or adjacent to the excavation area.
5. Leave the excavation area and wash hands before eating, drinking or smoking.
6. Avoid tracking soils from the excavation area. Scrub soils from boots and equipment before leaving the property.

